

MD 191 IS ASSUMED TO RUN  
IN A NORTH SOUTH DIRECTION

Maple Avenue

Project Description

This project involves the installation of two speed activated HIB's

Controller Operation

When the radar unit senses a vehicle traveling above a programed speed it will activate a contact closure output that will place a call into the controller to activate the flashers for a programable amount of time.  
(Possibly use the controller status bit "B" ring I for southbound and Ring II for northbound  
to activate a relay to turn the flashers on for the amount of extension time on that phase using phase 2 for southbound and phase 6 for northbound.

Proposed Signs

5.6



48" X 42"

WHITE ON GREEN  
BLACK ON YELLOW

Proposed Signals

1 - 4

Y

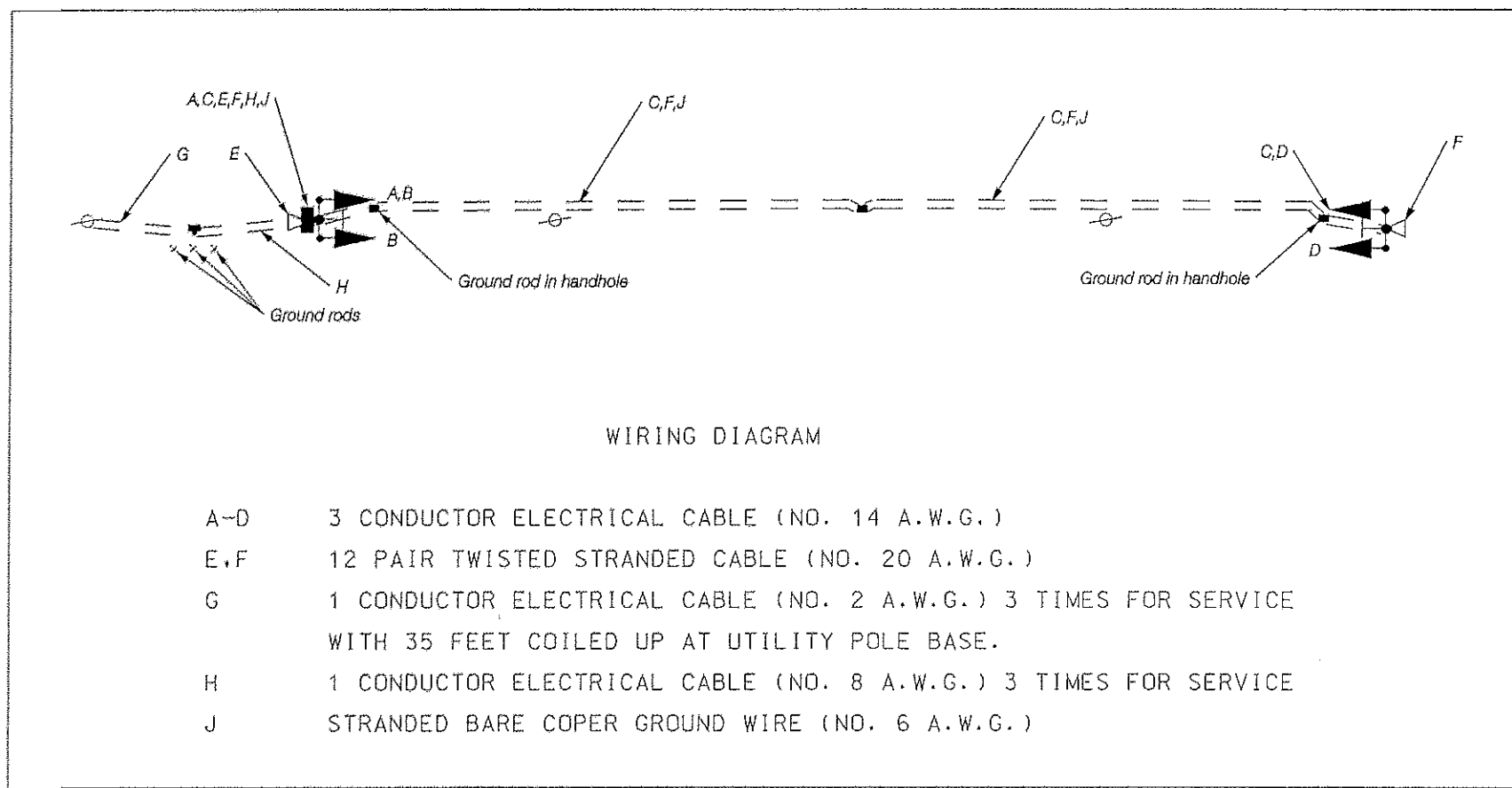
12"

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO.	QUANTITY	DESCRIPTION
9010	2 EA	(CONT/CAB/ADD) RELAY (110/120 VOLT) 11 PIN
9080	1 EA	CABINET INTERSECTION MONITOR, SIZE 5
9089	30 LF	FLAT SHEET ALUM. SIGN YELLOW, ORANGE, & SILVER 2 EACH ???? (48" X 42") (SIGN TO READ RESIDENTIAL AREA, REDUCE SPEED WHEN FLASHING)
9098	4 EA	SIGN HARDWARE 30 INCH FORM TUBE
9100	4 EA	SIGN HARDWARE ASTRO BRACKET 84 INCH CABLE

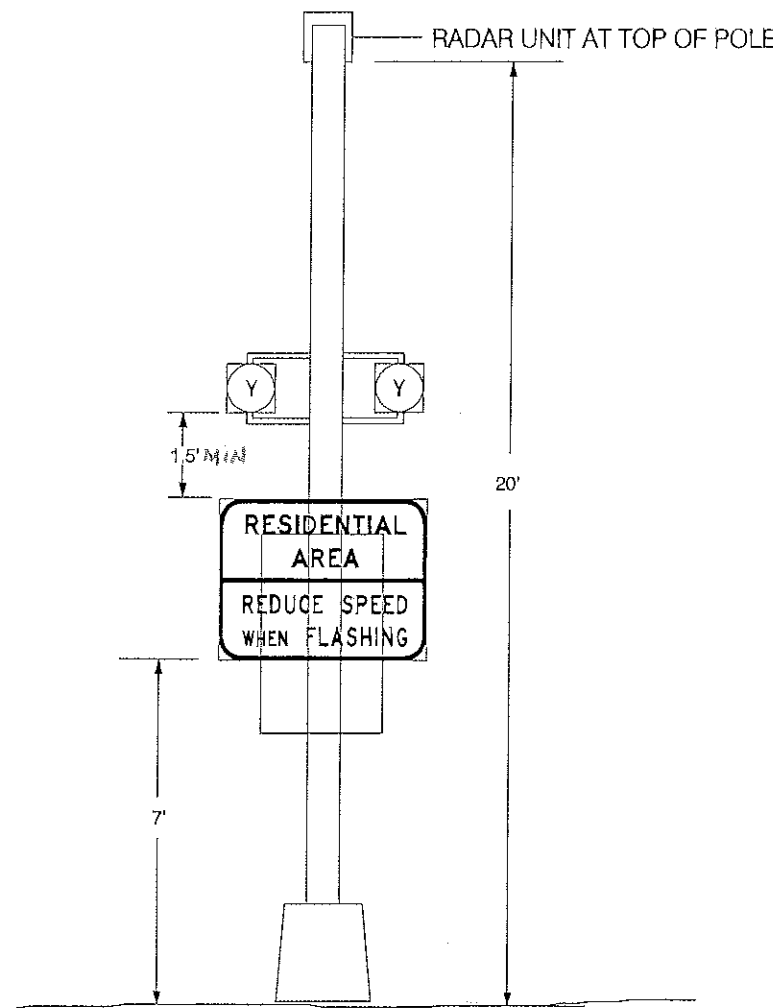
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	2 EA	MAINTENANCE OF TRAFFIC
8001	2 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8003	2 EA	FURNISH AND INSTALL BREAKAWAY PEDESTAL POLE (ANY SIZE)
8019	1 EA	INSTALL CONTROLLER AND CABINET - POLE MOUNT
8024	220 LF	FURNISH AND INSTALL 2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8030	30 LF	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8033	3 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8034	5 EA	FURNISH AND INSTALL GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
8035	1 EA	FURNISH AND INSTALL CONNECTOR KIT - TYPE 1
8036	2 EA	FURNISH AND INSTALL CONNECTOR KIT - TYPE 2
8043	260 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 3 CONDUCTOR (NO 14 AWG)
8047	150 LF	FURNISH AND INSTALL ELECTRICAL CABLE 1-CONDUCTOR NO. 8 AWG- THHN/THWN
8049	280 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8053	30 SF	INSTALL OVERHEAD SIGN
8059	1 EA	DELIVERY OF REMOVED CONTROLLER, CABINET AND GALVANIZED SIGNAL STRUCTURE
8060	1 EA	REMOVAL OF EXISTING MATERIAL AND EQUIPMENT PER ASSIGNMENT
8066	1 EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIP (120/240, 1 PHASE 3 WIRE SYST)
8069	1 EA	FURNISH AND INSTALL PHOTOCELL
8084	4 EA	FURNISH AND INSTALL 12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
NEG.	300 LF	FURNISH AND INSTALL 12 PAIR TWISTED STRANDED CABLE (NO 20 A.W.G.) (BELDEN #9516 OR APPROVED EQUIVALENT.)
NEG.	2 EA	FURNISH AND INSTALL EIS RADAR UNIT OR EQUIVALENT TO BE INSTALLED IN THE FORWARD LOOKING MODE
NEG.	250 LF	FURNISH AND INSTALL ELECTRICAL CABLE 1-CONDUCTOR NO. 2 AWG-THHN/THWN



CONSTRUCTION DETAILS

- Install pole base, breakaway base, 20 ft. pedestal pole, sign, signals, and speed detector unit as shown. Speed detector unit should be aimed to pick up southbound traffic only.
- Install pole base, breakaway base, 20 ft. pedestal pole, sign, signals, speed detector unit, and cabinet as shown. Speed detector unit should be aimed to pick up north bound traffic only.
- Install 100 amp midwest service pedestal with 20 amp and 30 amp breakers
- Install Handhole
- Install 4" Schedule 80 PVC electrical conduit with 3 # 2 gauge wires for service with 35 ft. coiled up at pole base.
- Install 2" Schedule 80 PVC electrical conduit.
- Remove existing LED sign, controller, cabinet, and solar panels and return to sign shop warehouse.



REVISIONS		APPROVALS	
		ASST. TRAFFIC ENGINEERING DESIGN DIVISION	
		ASST. DISTRICT ENGINEER, TRAFFIC	
		DIRECTOR, TRAFFIC & SAFETY	
DRAWN BY: J. Henkel		F.A.P. NO. 3945	
CHECKED BY: M. Henkel		S.H.A. NO. M0857A56/B56	
SCALE: 1"=20'		COUNTY: MONTGOMERY	
DATE: 8/31/99		LOG MILE: 150.9109.65	
		T.I.M.S. NO. D355	
		SHEET NO. 01 OF 01	